

A SYSTEM FOR PLANNING AND TIMING ANIMATION

PDF provided by www.animationmeat.com



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pdf version edited by Jon Hooper

PHASE I: PREPARATION

1. **Study Storyboard** - Know what the main point of your scene is.
2. **Listen to Soundtrack** - Think about an approach that is unique and entertaining.
3. **Number Exposure Sheet** - Using odd numbers skipping every other frame.

PHASE II: THUMBNAIL

1. **Scenes with Dialog** - Use dialog as your reference for timing.
2. **Scenes w/o Dialog or Music** - Use stopwatch to figure out timing.
*Timing for animation tends to be quicker than real time. Time out your action 3 to 5 times taking the average but favoring the shorter length.
3. **Phrasing** - Break dialog into its basic phrases. A phrase has a natural break in it.

Example:

1. I'll even toss in a little extra ---
2. for your patience.
3. Ah Ha Hahahahah!

These 3 phrases were evident in Dom Delouises reading of this particular line.

4. Thumbnail out the attitudes and action

Thumbnail out the attitudes and action that illustrate the phrases and acting in the scene.

Note: Write numbers down under the thumbnails to indicate how long a specific action will be.

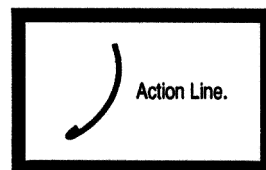
See example: Dom Delouise in Oliver



Note: Thumbnails are basically illustrating the phrases. The corresponding numbers from the exposure sheet are indicated under the pose.

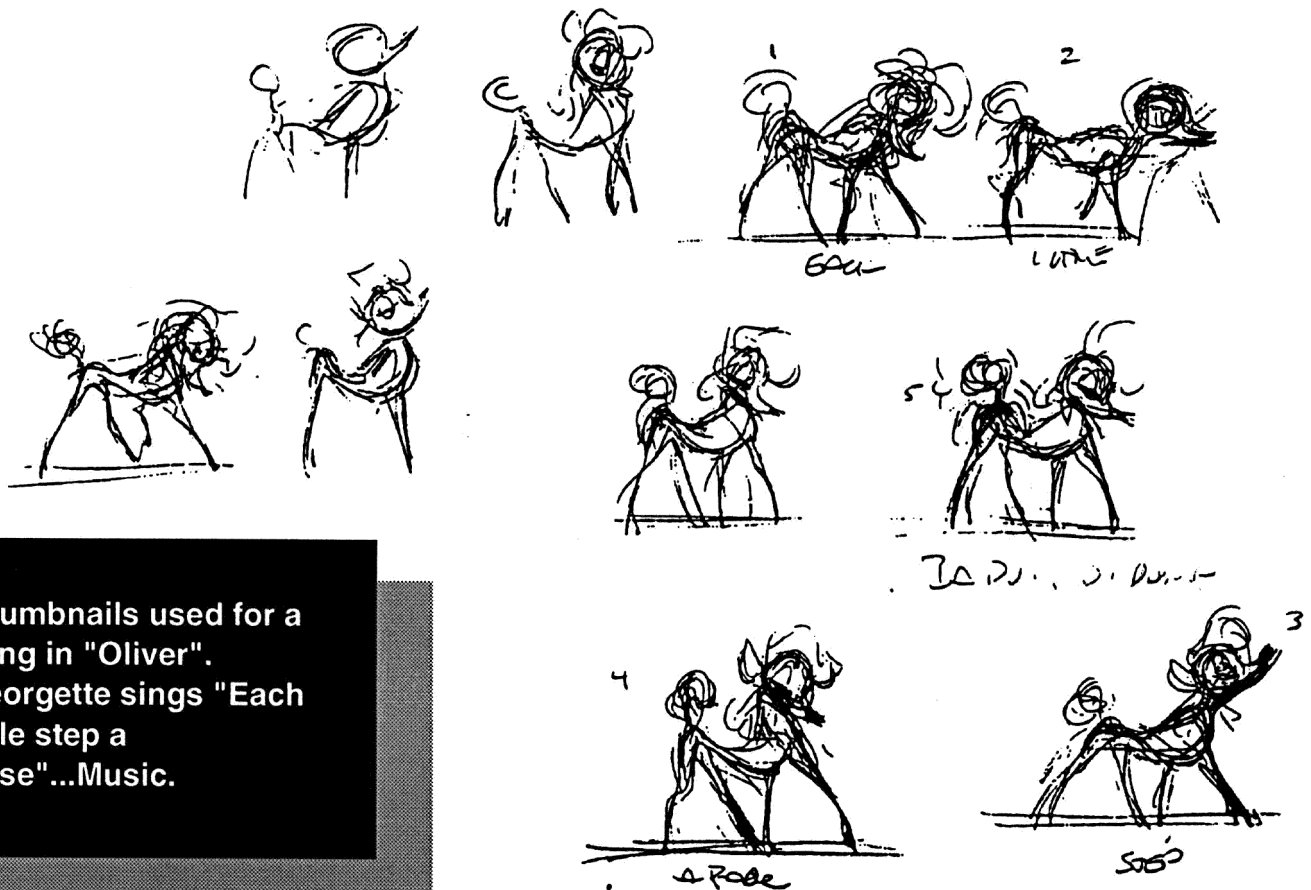
Thumbnailing is the time to explore as many ways of presenting an idea as you can.

In this miniature stage you should be concerned about the poses that have a clear change in line of action from one phrase to another.



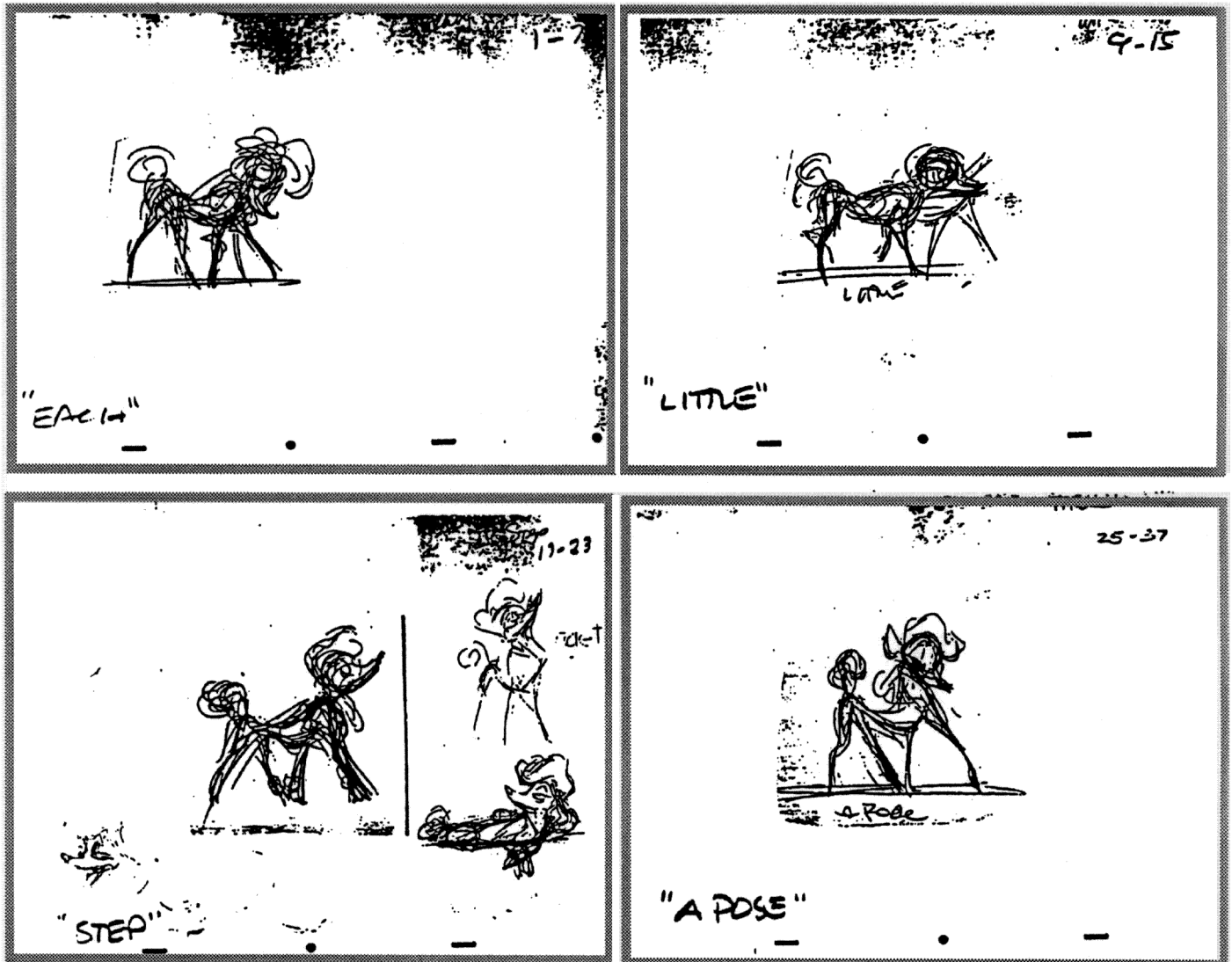
Phase III : Thumbnails

1. **Blow up thumbnails by Xerox or by hand** (Be sure to capture the essence of the thumbnails). Use these as a guide post to animate by. They are not your extremes but just poses and attitude you are moving toward and through.



When you thumbnail out your scene you should be thinking animation. What pose will work best going into the next. Notice on the word "Each" Georgette's head is tucked close in the **squash** position. On the word "step" it is in the **stretch** position. The #3 pose works well as an anticipation into pose #4. As you thumbnail keep in mind you are always setting yourself up for the next pose.

2. Thumbnails transferred to Animation Paper



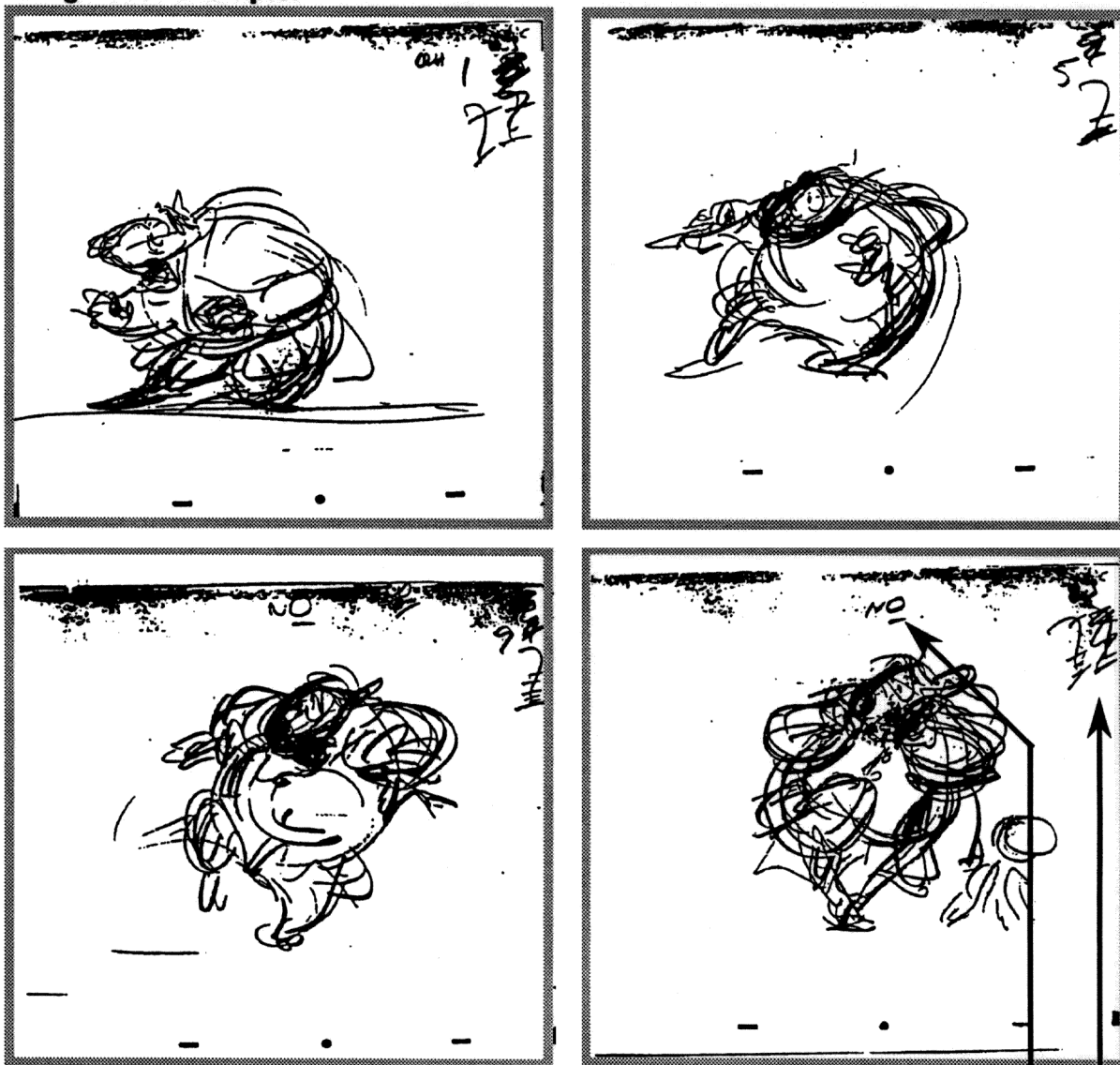
With the key poses in place you can now flip the drawings and get a feeling for the movement. You can also number the poses based on the phrases on the exposure sheet.

Pose Test

3. Do a rough timing test (Pose Test)

This is a quick approach to the scene that should be done without laboring over individual drawings. Instead you should dash through the drawings trying to capture the feeling of the action and gesture of the attitude.

Rough Test Example:

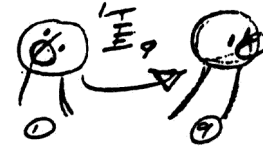


Write the dialog on the top of the drawing , underline the accent of that particular drawing.

Indicate rough timing charts - These will probably change as you get more drawings on the pegs, and can flip them getting a better feeling for the movement. Timing charts go in the upper right corner.

4. Timing charts

A clue to the animators thinking. A guide to show where the drawings are to be placed between the extremes.



Slow in - Action slows down gradually



Slow out - Action picks up speed gradually

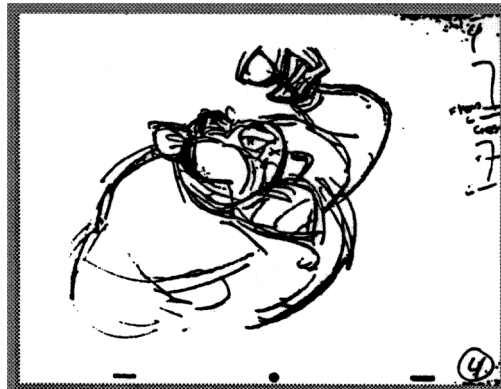


Even - Keeps action in a constant speed

A. Different Timings

B. How many extremes do I need?

Enough to describe arcs and head turns
Enough to describe any changes in shape
Enough to indicate to you a desired effect



In this action the desired effect was an explosive timing that moved from #4 to #6. The timing is on ones and slows into #6 which in turn slows into #10 where the drawings switch to twos.



Animation Seven Essentials

1. Make a positive statement

Do not be ambiguous in your approach

Thumbnail until you have that clear approach and conviction. Be bold and decisive.

2. Animate from the heart

Feel your drawings

Let your action be an extension of how you believe the character feels.

Put yourself in the place of the character your animating - associate.

3. Make expressions and attitudes real and living

Focus on the eyes and eyebrows - mouth and cheeks

Always lead with the eyes.

Be sure the eyes are solid and placed securely in the head.

Study your own attitudes. Ask yourself does this drawing feel the way my face feels.

4. Draw as if you were sculpting

Describe the forms in dimension

Understand the character design in 3D

5. Animate the forces

Allow the momentum of and already animated movement to suggest the next drawing.

Draw the leading edge of forces.

6. Visualize and feel dialog

Be sure you are truly capturing the inflection, volume and tone of the dialog with proper mouth shapes.

7. Simplicity

What is the essence of your scene, your action , your expression - what is indispensable in communicating your thought?

Character Development

"The animator will flounder with indecision unless he can get inside the character and know precisely what actions are right for that personality. As long as there is any confusion the drawings will be vague and indecisive."

Johnston & Thomas "The Illusion of Life"

Story

Character makes the story live.

Do I care about what happens to the characters?

The story should bring out the character.

Conflict.

Personality

Some questions to ask.

How does the character feel about himself?

What does he want? His hopes desires and goals.

What is he afraid of?

His weaknesses?

What is his world view.

History

Write a history of your character that brings him up to the present moment.

What events or people shaped him into what he is?

Environment

What is his surrounding world like?*

Hostile- Friendly, Cultured-Naive, Oppressive-Invigorating

Country Farm - College Campus, Luxurious- Desolate

Oriental- Western, Poor-Rich.

Music

What style of music reflects the heart and attitude of your character?

Design

The image your character portrays

Describe his appearance * - Intimidating, sensual, dumpy etc.

Attitude - Is it motivated by who your character is?

Costume - Does it give us insight into the character?

Shapes - Are they simple, clear, communicating and animatable?

*** Use Thesaurus and other resources including - Photos, film, drawings, paintings, books, magazine ads etc.**

Contrast

Contrast creates an intrigue and curiosity in the audience.



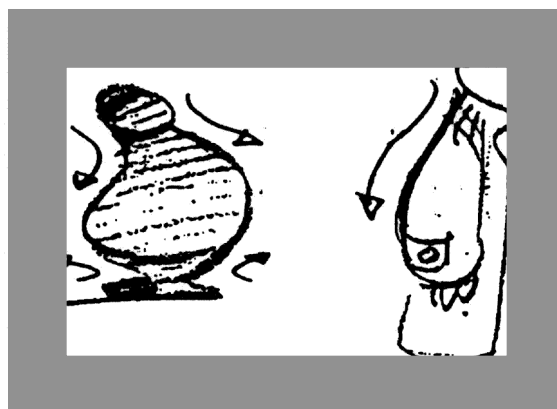
Story - Involving many elements, character, circumstances and conflict. What is at stake? What is the character risking? Is there hope for the audience to "side" with?

Movement - A signal of intention for the audience



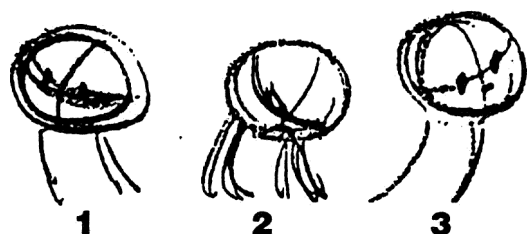
Arcs show anticipation

Line and Form - just as in movement a shape can narrow to anticipate a widening

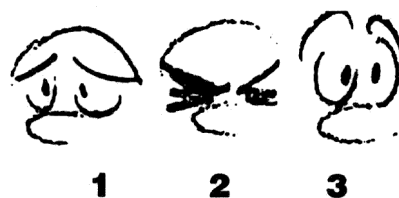


Note Shape changes

Angles and Tilts - Anticipate with head angles and tilts. Ex: head angle dips in #2 before #3.



Expression - Attitudes should always be set up by the previous attitude.



Anticipation

Anticipation is built by clarity - A simple, clear idea that communicates and captures an audience is your goal.

Anticipation Through:

Character - If the audience knows your character they can enjoy anticipating his reaction in a given situation.

Music - A feeling of "Get ready for this!" is largely due to the right music. It can anticipate joy, fear, patriotism, love, etc.

Staging - Your point of view must be clear. What do I want to say with this scene? How do I want the audience to feel in this shot? How you stage the scene clues in the audience to how they should feel.

A Tree

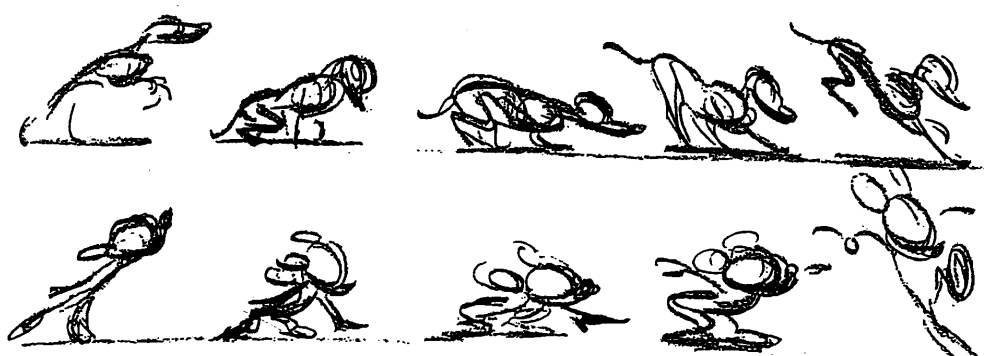


Note how the staging of the tree changes the mood of the shot.

Action-Through powerful and graphic images anticipation can be built for a short period of time.

Relationship- Two opposing characters create an automatic tension and anticipation.

Conflict- An audience is entertained by anticipating a resolution to the conflict.



Animating and Drawing 4-Legged Animals

PDF created February 19, 2000

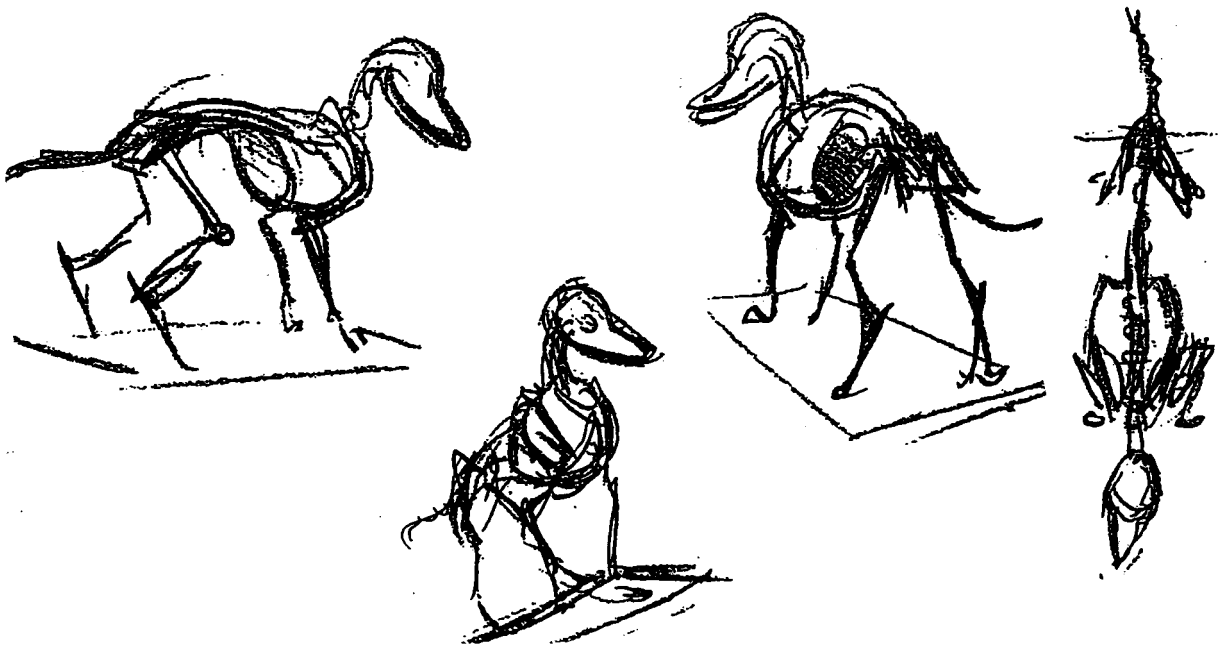
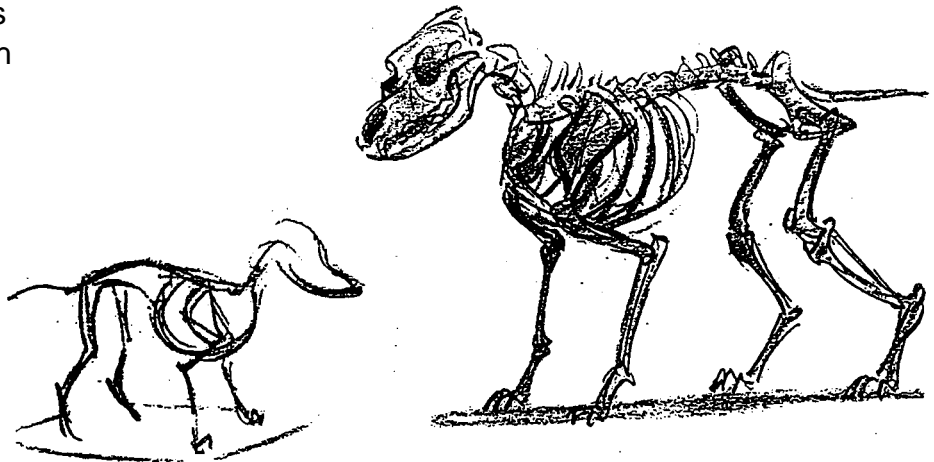
Author Unknown: Maybe Glen Keane

Animating Four Legged Creatures

The purpose of these notes is to give a simple approach to animating a four-footed creature.

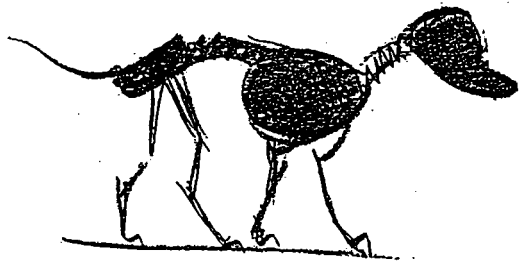
An animator should feel confident in the character he is animating. If not, his work will lack strength and conviction.

He needs to feel "free" to animate and not get bogged down in complex anatomy.

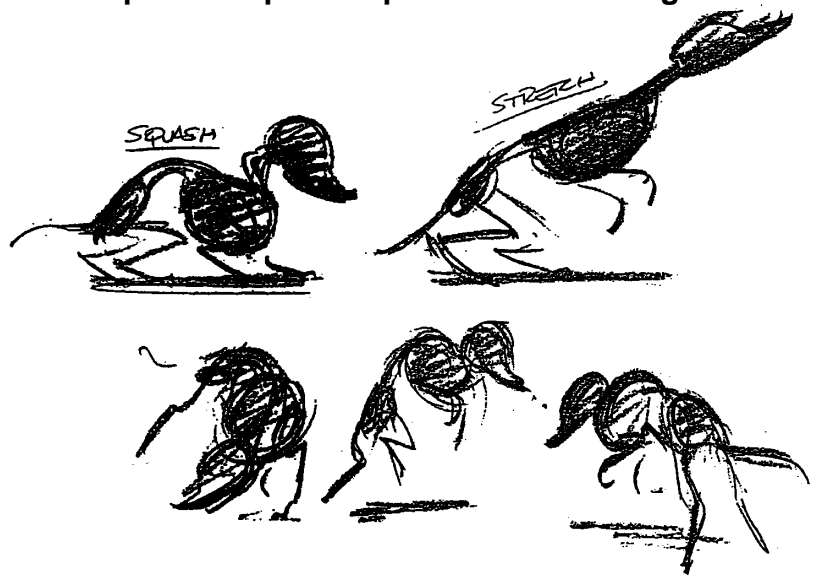


Animation Approach

3 basic solid masses
connected by a flexible spine.



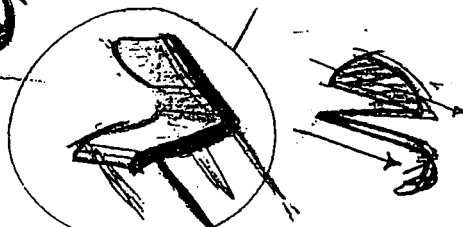
Keep the shapes simple when animating



Overlap shapes for Dimension



Note: Leg bones
parallel each other like
a folding chair.



Wrong

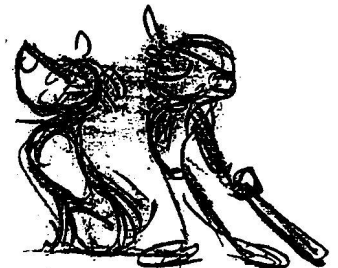


Attitude



Attitude is first, then put it on model

If you aren't sure how to draw an attitude - draw it using a simpler 2-legged character first.

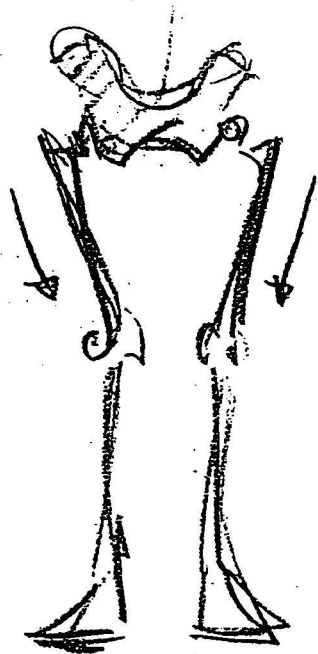


Let the Entire body reflect the attitude.

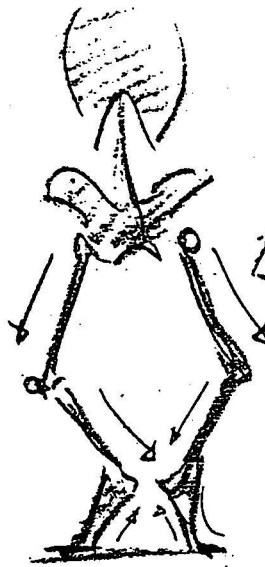


Follow rhythm from head to tail

Comparative Anatomy



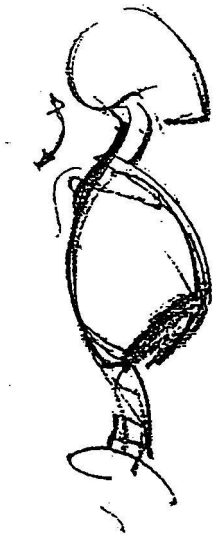
Note angle of thigh bones of humans points inward...



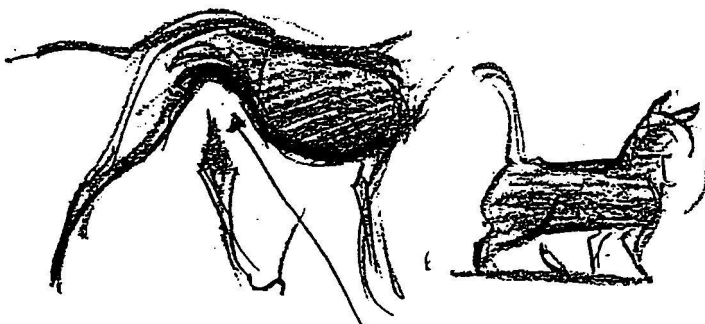
But when we stand on our toes the angle points outward as the heels point inward...



...Just as a dogs



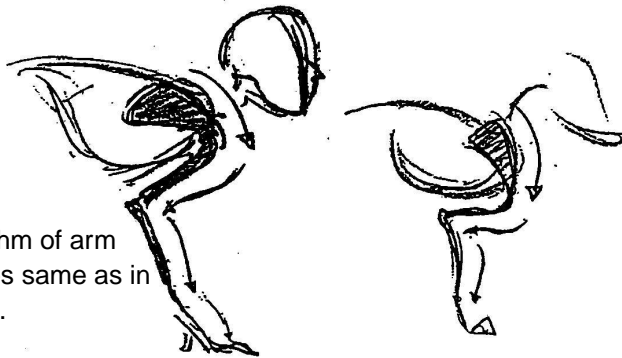
Ribcage same shape/ Necks curve in the opposite direction due to dog having to hold head out.



Note tuck after ribcage.
(Cats tend not to have this "tuck")

Comparative Anatomy

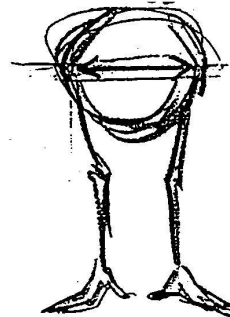
Rhythm of arm bones same as in dogs.



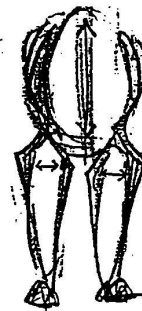
Rhythm of human legs reflected in rear legs of animals.



Horizontal human ribcage

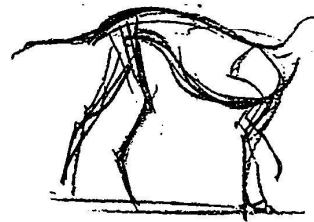


Vertical animal ribcage.



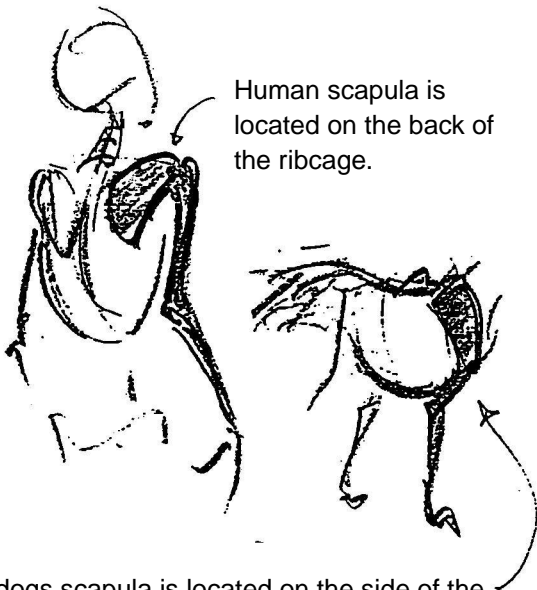
Lateral movement on dogs elbows.

Longer rear legs give hind end a lift.



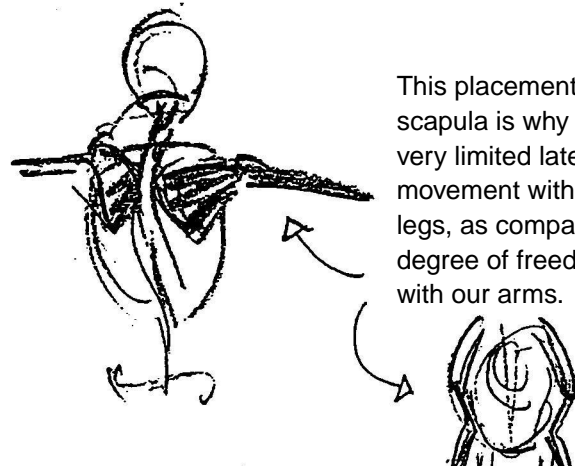
Dogs rear legs are longer than front as are humans legs longer than the arms.

Human scapula is located on the back of the ribcage.



A dogs scapula is located on the side of the ribcage

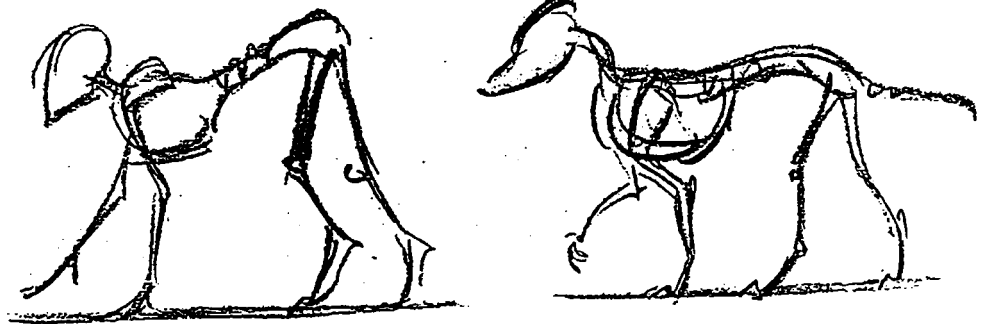
This placement of the scapula is why a dog has very limited lateral movement with its front legs, as compared to the degree of freedom we have with our arms.



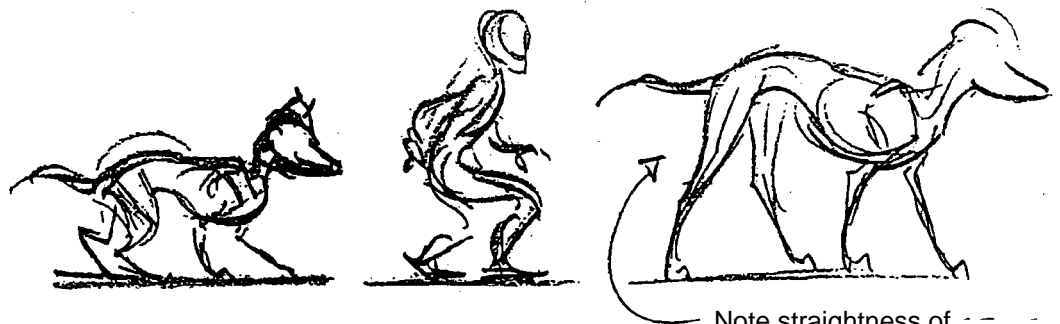
Comparative Anatomy



An animal walks on his toes and "fingers".
This gives his walk a springy, light feel.



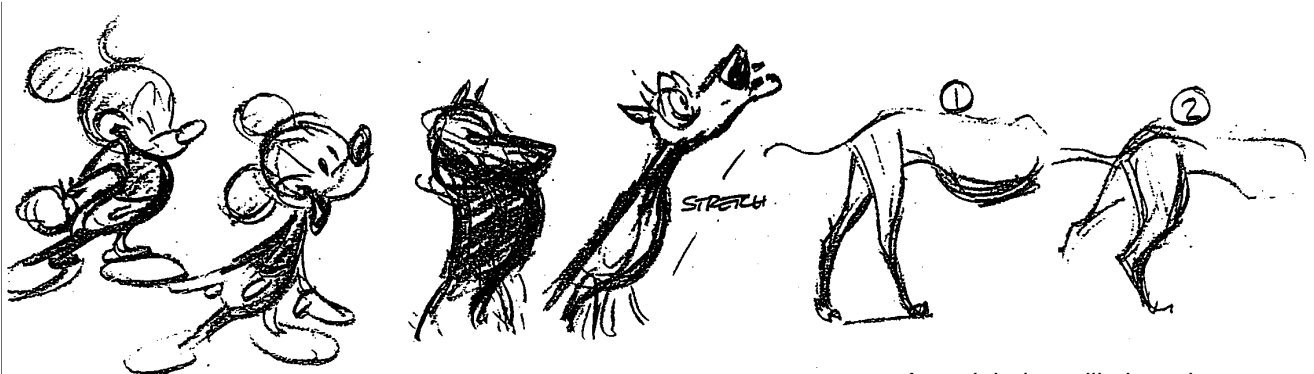
An animal walks in basically the same pattern as a human crawls.



In a relaxed attitude a dogs
legs are not bent in a
crouching position, just as a
mans are not.

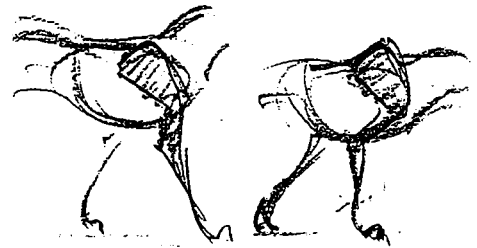
Note straightness of
backlegs particularly.
If they are animated
already bent in a walk
it will be difficult to
show any subtle
squash and stretch.

Squash & Stretch

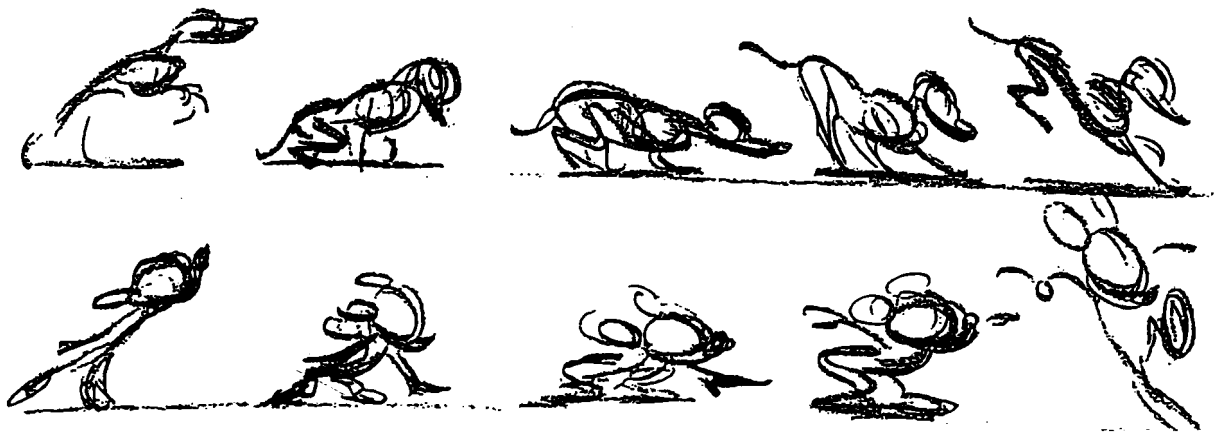


Build up chest mass in anticipation.

A straight leg will give a better chance for a subtle squash in following action.



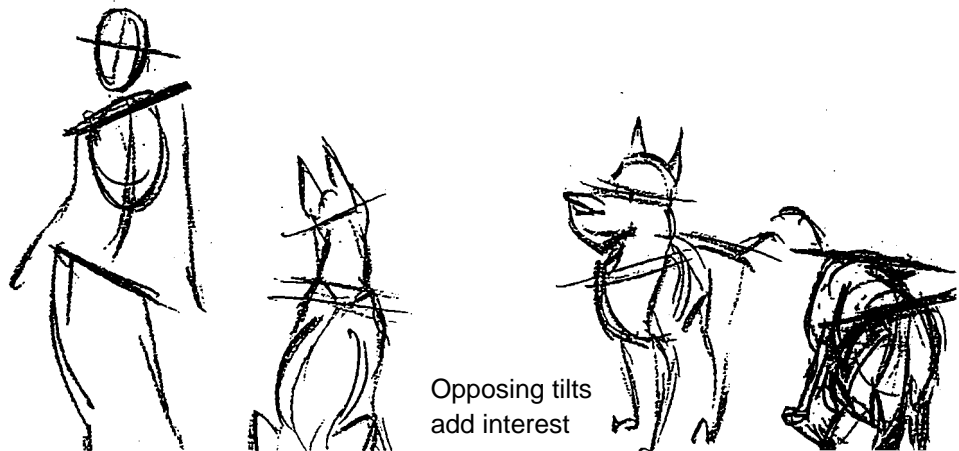
As weight comes down on the foreleg, the scapula rises above backline.



Animation Drawing Points

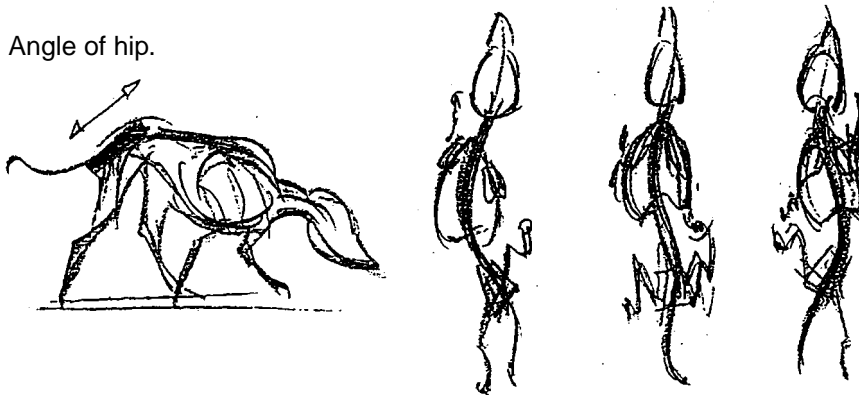


As animal shifts weight from one leg to the next in a walk, the hip will drop to the side that has no support.



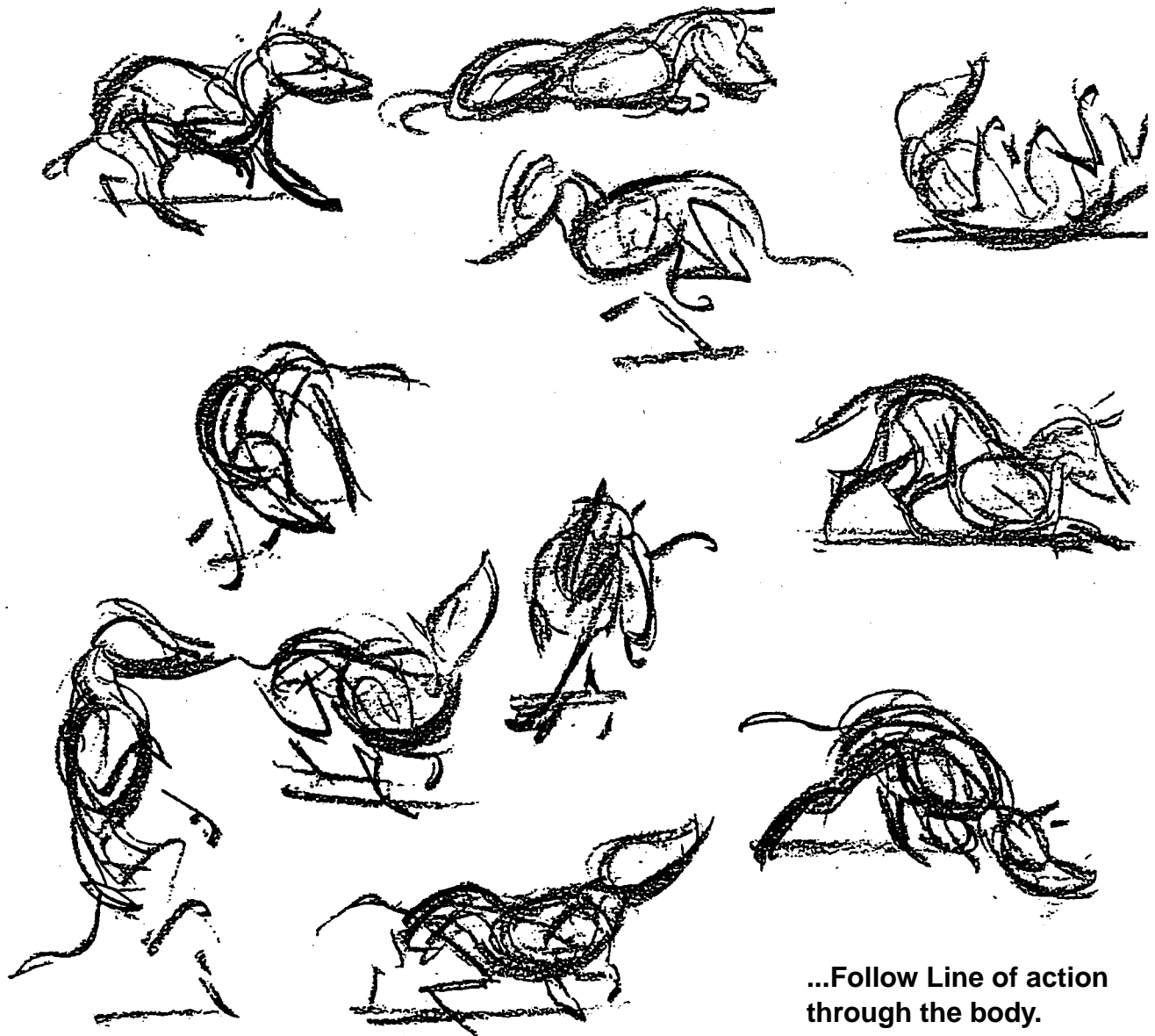
Opposing tilts
add interest

Note: Angle of hip.



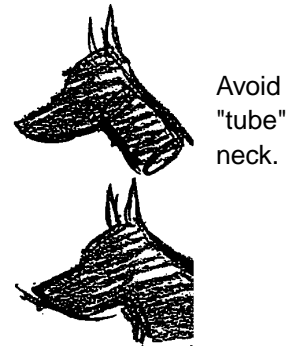
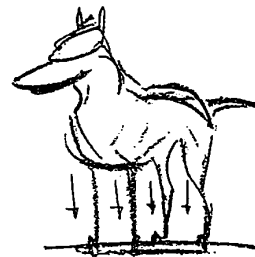
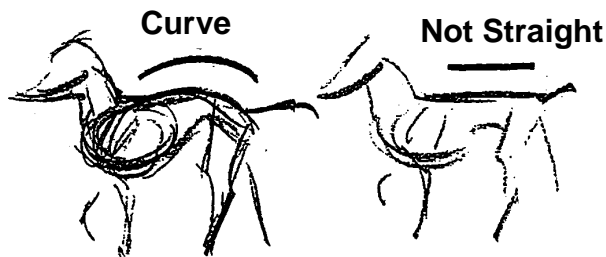
Line of action reverses in animal walks

Line of Action



...Follow Line of action
through the body.

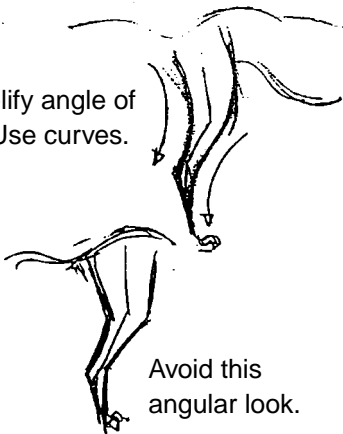
Animal Drawing Points



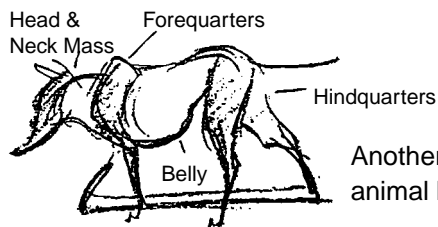
Watch for static leg placement.

Neck tapers show Muscular necks on bigger dogs.

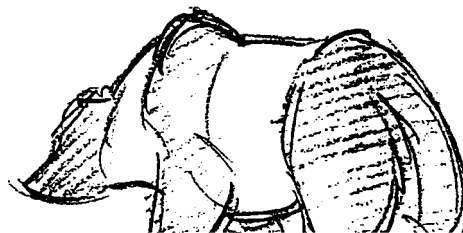
Simplify angle of leg. Use curves.



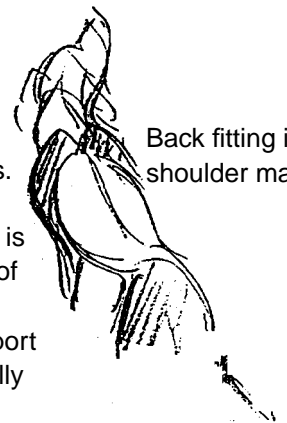
Avoid this angular look.



Another breakdown of animal body is into parts.



Shoulder mass is large because of the muscle needed to support head - Especially noticeable in the Grizzly Bear.



Back fitting into shoulder mass.